

I. AMENDMENTS TO THE DRAWINGS

Figure 4 has been amended to label block 218 as “Local Oscillator” and each of blocks 406 and 408 as “Single Side Band Up Converter”, as specified on page 13, line 28 to page 14, line 5 of the specification as filed.

Attachment: A replacement sheet containing the amended Figure 4 is found in the Appendix following page 17 of this paper.

III. REMARKS / ARGUMENTS

The Applicants gratefully acknowledge the potential allowability of claims 2, 3, 9 to 18, 20, 31 to 33 and 35.

A. Summary of the Amendments

The present application now comprises thirty-two (32) claims, numbered 1, 3 to 18, 20 to 33 and 35.

Claims 1, 9, 10, 20 to 23, 29, 30 and 35 have been amended.

Claims 2 and 36 to 38 have been cancelled without prejudice. Claims 19 and 34 were previously cancelled.

The drawings have been amended to comply with a requirement made by the Examiner.

No new matter has been added to the application by way of the present response.

B. Objection to the Drawings under 37 CFR 1.84

On page 2 of the Office Action, the Examiner objected to Figure 4 under 37 CFR 1.84(n) and 1.84(o) because blocks 218, 406 and 408 are not labeled.

In response, Figure 4 has been amended to label block 218 as "Local Oscillator" and each of blocks 406 and 408 as "Single Side Band Up Converter", as specified on page 13, line 28 to page 14, line 5 of the specification as filed. Accordingly, the Examiner is respectfully requested to withdraw the objection to Figure 4.

C. Objection to Claim 36 under 37 CFR 1.75

On page 2 of the Office Action, the Examiner objected to claim 36 under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. It is respectfully submitted that the Examiner's objection is moot in view of the cancellation of claim 36.

D. Objection to Claims 1 to 38

On page 2 of the Office Action, the Examiner objected to claims 1 to 38 and required that the term "and" should be inserted before the last element of each claim.

With respect, this objection is without merit, as there is no requirement, statutory or otherwise, for the term "and" to be present before the last element of each claim. Nevertheless, in the interest of advancing prosecution, claims 1, 20 to 23 and 35 have been amended to include such a term.

E. Rejection of claims 29 and 30 under 35 USC 112

On page 3 of the Office Action, the Examiner rejected claims 29 and 30 under 35 USC 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner opines that the Analog to Digital (AD) converter element recited in claims 29 and 30 is not described in the specification or drawings.

It is respectfully submitted that the subject matter of claims 29 and 30, including the Analog to Digital (AD) converter element, is fully supported by page 12, lines 28 to 31 of the specification as originally filed and Figure 2 of the drawings as originally filed.

The Examiner is therefore respectfully requested to withdraw the rejection of claims 29 and 30 under 35 USC 112, first paragraph.

F. Rejection of claims 1, 4 to 8, 21, 23 to 28 and 36 to 38 under 35 USC 102

On page 3 of the Office Action, the Examiner rejected claims 1, 4 to 8, 21, 23 to 28 and 36 to 38 under 35 USC 102(b) as being anticipated by U.S. Patent 5,987,304 to Lätt (hereinafter referred to as "Lätt").

With all due respect, the rejection under 35 USC 102(b) is improper since the present application is a continuation-in-part of U.S. Patent Application Serial No. 09/220,076 filed on December 23, 1998, which is *before* publication of Lätt (*viz.*, November 16, 1999). It is respectfully submitted that the subject matter of each of at least independent claims 1, 21 and 23, as they stood prior to the present amendment, is fully supported by the specification of U.S. Patent Application Serial No. 09/220,076. For this reason alone, the Examiner is respectfully requested to withdraw the rejection under 35 USC 102(b).

Notwithstanding the impropriety of the Examiner's rejection, but in the interest of advancing prosecution, it is respectfully submitted that claims 1, 4 to 8, 21 and 23 to 28 are in condition for allowance, as set forth below. For their part, claims 36 to 38 have been cancelled thus rendering moot the Examiner's rejection of these claims.

Independent claim 1

Claim 1 has been amended to include the elements of former claim 2, which is now cancelled. In view of the Examiner's comments regarding potential allowability of claim 2 (see Page 7 of the Office Action), it is respectfully submitted that claim 1 is now in condition for allowance.

Dependent claims 4 to 8

Each of claims 4 to 8 depends on claim 1 and therefore includes by reference all of the elements of claim 1. Accordingly, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that claims 4 to 8 are now in condition for allowance.

Independent claims 21 and 23

Each of claims 21 and 23 has been amended to include the elements of former claim 2, which is now cancelled. In view of the Examiner's comments regarding potential allowability of claim 2, it is respectfully submitted that claims 21 and 23 are now in condition for allowance.

Dependent claims 24 to 28

Each of claims 24 to 28 depends on claim 23 and therefore includes by reference all of the elements of claim 23. Accordingly, for the same reasons as those set forth above in respect of claim 23, it is respectfully submitted that claims 24 to 28 are now in condition for allowance.

G. Rejection of claim 22 under 35 USC 102

On page 6 of the Office Action, the Examiner rejected claim 22 under 35 USC 102(e) as being anticipated by U.S. Patent 6,240,122 to Miyashita (hereinafter referred to as "Miyashita").

As described below, the Applicants respectfully traverse this rejection and submit that claim 22 is in condition for allowance.

For ease of reference, claim 22 is reproduced below with portions being emphasized:

A local oscillator manager, comprising:

- a) **a first input for receiving a bandwidth control signal characterized by a frequency that is variable;**
- b) a local oscillator generating a local oscillator signal characterized by a frequency;
- c) **a first single side band up converter for receiving the bandwidth control signal** and the local oscillator signal and for releasing a signal that is the sum of the frequency of the local oscillator signal and **the frequency of the bandwidth control signal;** and
- d) **a second single side band up converter for receiving the bandwidth control signal** and the local oscillator signal and for releasing a signal that is the difference of the frequency of the local oscillator signal and **the frequency of the bandwidth control signal.**

It is respectfully submitted that Miyashita does not disclose or suggest the above-emphasized elements of claim 22.

Miyashita describes a receiving apparatus in a code spreading system such as Code Division Multiple Access (CDMA). Miyashita is totally unconcerned with bandwidth control and thus, unsurprisingly, Miyashita's apparatus lacks any input for receiving a "bandwidth control signal characterized by a frequency that is variable", as claimed. In rejecting claim 22, the Examiner indicated that element 19 of Miyashita's apparatus represents such an input and that the signal 17 propagating in Miyashita's apparatus represents such a "bandwidth control signal". With respect, the Examiner is incorrect. Specifically, the signal 17 propagating in Miyashita's apparatus is a "spreading code signal [...], which is a spreading code assigned between the transmission and reception stations and is in phase with the spreading code signal on the transmission side" (emphasis added, see col. 5, lines 28 to 33). Clearly, this "spreading code signal" has nothing to do with the claimed "bandwidth control signal" and the Applicants fail to see how the Examiner could contend the contrary. Furthermore, notwithstanding the total lack of relevance of the spreading code signal 17 to the claimed bandwidth control signal, the element 19 of Miyashita's apparatus is a "reciprocal converter" which does not even receive the spreading code signal 17 but rather receives "I components" and "Q components" produced by conversion of bits in the spreading code signal 17.

It is thus ample clear that Miyashita in general, and in particular the element referred to by the Examiner, in no way discloses or suggests the claimed “first input for receiving a bandwidth control signal characterized by a frequency that is variable”.

In addition, since Miyashita does not disclose or suggest receiving the claimed bandwidth control signal, Miyashita cannot possibly be held to disclose or suggest the claimed first single side band up converter for receiving the bandwidth control signal and a local oscillator signal and for releasing a signal that is the sum of the frequency of the local oscillator signal and the frequency of the bandwidth control signal. Similar comments can be made with respect to the claimed second single side band up converter.

Accordingly, it is respectfully submitted that Miyashita fails to disclose or suggest at least one element of claim 22 and thus does not anticipate that claim. The Examiner is thus respectfully requested to withdraw the rejection of claim 22, which is believed to be in condition for allowance.

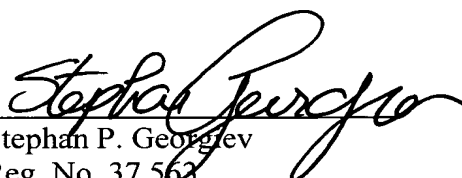
IV. CONCLUSION

The Applicants are of the view that claims 1, 3 to 18, 20 to 33 and 35 are in condition for allowance. Favorable reconsideration is requested. Early allowance of the application is earnestly solicited.

If the claims of the application are not considered to be in full condition for allowance, for any reason, the Applicants respectfully request the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,

Date: January 27, 2006


Stephan P. Georgiev
Reg. No. 37,563
Agent for the Applicants

SMART & BIGGAR
1000 De La Gauchetière Street West
Suite 3300
Montreal, Quebec H3B 4W5
CANADA
Tel: (514) 954-1500
Fax: (514) 954-1396